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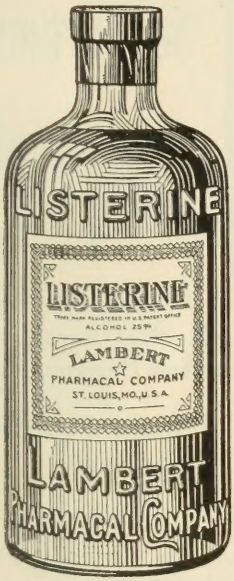

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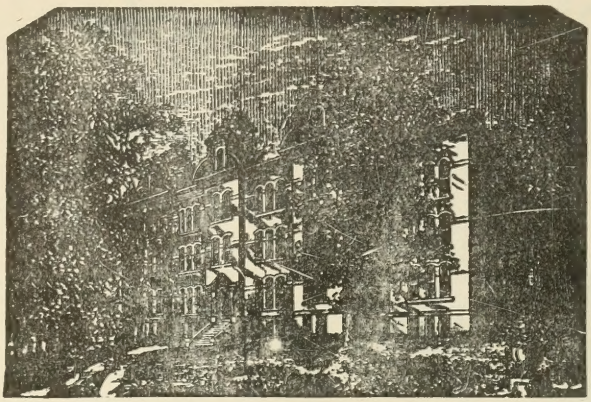

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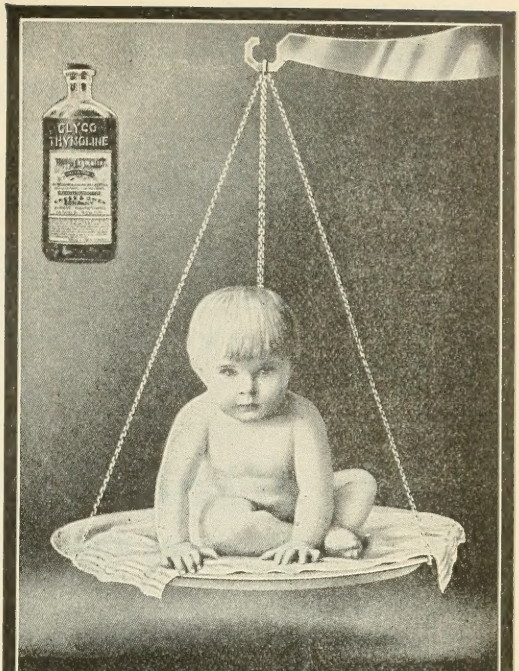

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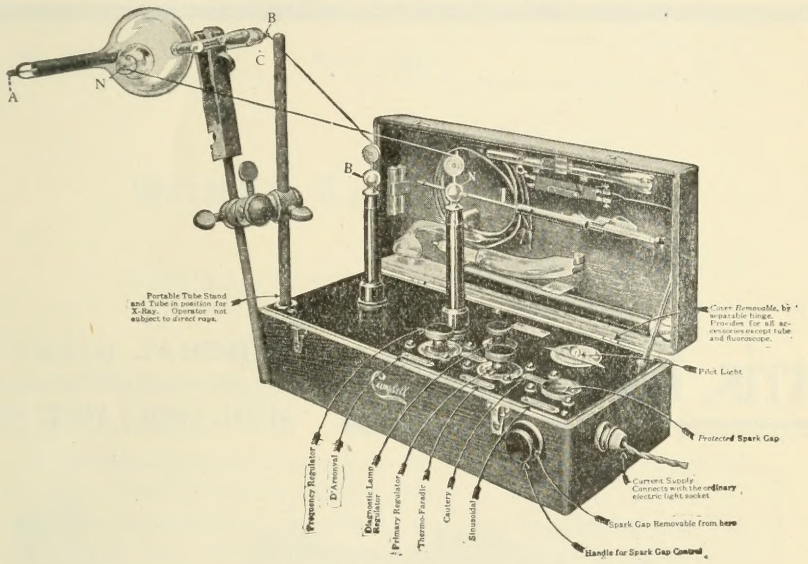

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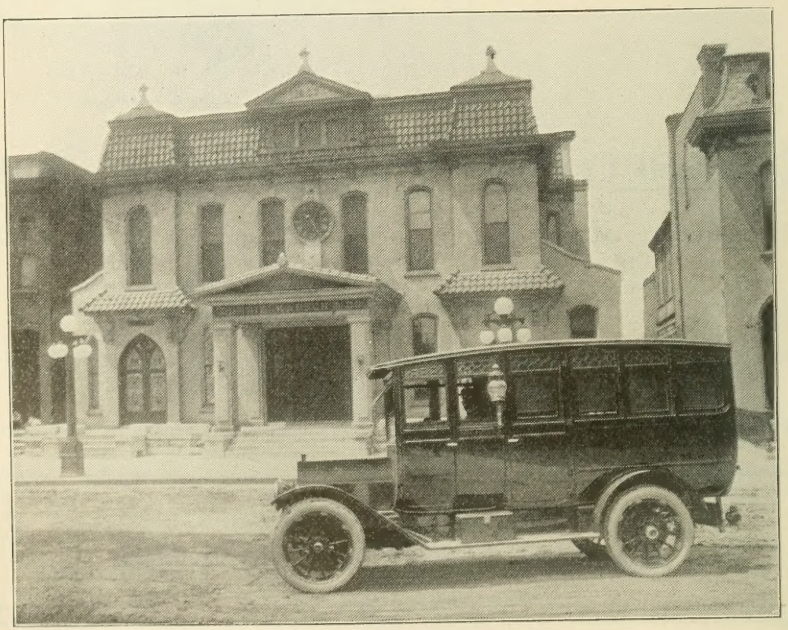

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NASHVILLE JOURNAL
— OF —
MEDICINE AND SURGERY

CHARLES S. BRIGGS, A. M., M. D., Editor
W. T. BRIGGS, M.D., Associate Editor.

VOL. CIX. MAY, 1915. No. 5

Original Communications

MEDICAL BOOKS AND JOURNALS.

BY T. D. CROTHERS, M.D.,
Editor Journal of Inebriety, Hartford, Conn.

An eminent physician has given me a text for this study in the following extract from a private letter:

"At the beginning of my practice one medical journal was considered sufficient, and I planned to buy three or four medical books a year, and thus keep in touch with medical progress.

Twenty years later I practically gave up buying medical books and subscribed for more journals, and now after forty years of practice I realize that medical journals are far better investments than medical books. The latter have filled the shelves of my library, but are seldom consulted or studied, while the former are looked over with care. Some journals I have bound, others go the way of the daily papers."

This outlines clearly the experience of a large number of medical men who are students. During the last year there were over 100 bound medical works published in this country and Europe. Each one claimed to be the clearest and most complete statement of the progress of science up to the present. Next year, another

hundred volumes or more will take their places, all claiming the same thing; and these will be followed by others as the years go by.

The encyclopedias and symposium studies of subjects by many authors claim to give a more perfect outline of science, and at all events they enable each other to express himself in the best possible way.

A large number of these works are text-books for students and recent graduates, and treatises on special subjects, which sell to the friends and acquaintances of the authors. In all the large colleges there are teachers who write text-books, and students think they are the last words of science, and hence purchase them. How far these volumes are actual contributions to the growth and development of medicine are questions that will be answered differently by different persons.

The catalogues of publishers become more and more bulky, and the difficulty of discriminating in the selection of the books that are of use and valuable, increases.

A very grateful patient of a young physician left a carte blanche order at a bookseller's to send the doctor every book published, pertaining to medicine, in the English language, as they appeared. At the end of five years he had to enlarge his office for additional room to accommodate these books. To read them was impossible, even if he would give his whole time to it. Finally his benefactor died, and the arrival of new books stopped.

Excepting a few books addressed to students, and these devoted to some specialty, by leading authorities, the demand and sale of all books are on about the same level. The popularity of some one, may create a demand for his writings, but this is transient. Many books are written for the purpose of giving standing and character to the authors, the same as an advertisement, and this sometimes is successful, but the disappearance of the author is followed by the death of the book.

Publishers, nothwithstanding their sharpest forecasts in the literary world, are unable to predict the life of a book, or to what extent it will be called for by the reading public. Many of them during the last few years insist that the author pay the first cost

of printing, and thus become partners in the capitol invested. Some houses make a specialty of this. Others publishers continue the old customs, only set up a higher standard of style and culture, and demand that the mss. offered be cut and pruned so that it will approximate some standing, and the work of preparation is charged to the author. This is the explanation of the rather startling fact of the good style and finish of volumes, written by certain authors which is foreign to their every day thought and work.

In a general way the English and German books represent a little better work than the American, but critics find their volubility and dogmatism a serious objection. The American books are direct, of sharper cast and clear setting, but on the whole they all rank about the same. The sudden depreciation in the value of books and their demand on the market is a hint of the evanescence and changeableness of such works. Last year a surgeon died, leaving a library of over 5,000 volumes, which were inventoried at a little over $200,00. Their original cost was over $10,000.00.

One of our members spent over fifteen years of time in the preparation of a set of volumes which sold for $30 or $40. Today they can be bought for $2 or $3. Like the automobiles, books depreciate with astonishing rapidity, and only now and then a volume retains its value with age. The still-born books are growing in numbers, and the books that reach childhood and early manhood are not increasing; and the books that go on to fifteen or twenty years and still live are unusual. Of course there are exceptions. Some books are re-born and galvanized into new life, and start out with considerable promise, but the senile stage and extinction are sure to follow.

In reality, the average book on medicine is but a little more substantial than the journals. While they mark the progress of scientific study along general and special lines, there is an uncertainty and changeableness that is inseparable to the thoughts and conclusions which they give. They are popular today, superceded tomorrow, and forgotten the next day. If it were not for the bookagent, with his hypnotic volubility, the circulation of many books would be very limited.

There is in this no disparagement of the efforts of ambitious men to write books. On the contrary, it is a stimulus to venture into this great lottery where the prospect of drawing prizes—by writing a book that will live 15 or 20 years—is most fascinating. The books of today are supposed to bring messages and conclusions that are helpful and stimulating for their readers.

We look to books as to friends and teachers. They are the practical guides for the present, that we can study and compare, but they are human and good for today. We want them in our libraries, but we want to make a choice and selection, and this, sometimes, is very bewildering.

Journals are different. We do not expect them to summarize, forecast and determine the great advances of science. We expect from them the best objective view of the present, with the clearest outlook of events of today, and the things that are tangible, real, and in sight.

Journalism is undoubtedly more closely related to the science of present and not of the past or the future. They should be historic pictures contemporaneous of the present stage of progress and development. Forty years ago there were less than a dozen medical journals published in this country. Today, there are over 200, and the number is increasing.

Jounalism is undoubtedly more closely related to the science of medicine, and the evolution of the great truths, than books. Journalism is in the ascendency and books are in the renascent period. One is going up, steadily widening and broadening; the other is in the flux and change.

Editors who assume that journals should follow the trend of books and give learned summaries of past events and wise forecasts of the future, in their regular weekly and monthly issues, make serious blunders. While journals have a tremendous influence, it is limited to the present, and this depends on the wisdom of giving correct views of things as they are,, of discoveries and researches of science, as they appear in the light of the present.

Of the two kinds of journals most prominent—one the organ of societies representing their interest and thought, and the other independent—culling from all sources what appears to be the most

important and valuable things called for by the entire profession. Many persons believe that the society journal is the highest and most stable form of literary work. They believe that organization and systemization of medical literature along well appointed lines, is the only road that leads towards substantial progress.

The publication of transactions and papers read before the society, to them is the first essential. In reality it is to give prominence to the work of their members, assuming that they represent the best work done. All other matters are subordinate and collateral. There is in this view a trades union sentiment and a standard oil system of harnessing everything down to a certain plan, and according to certain theories and doctrines, which are supposed to be immutable and above question.

Theology has tried this for hundreds of years, and has failed. Governments have made the same experiment of setting up a standard and forcing everything to approximate it, and they, too, have failed and lost. There is in this something that is opposed to the very genius of our civilization. The freedom of thought and evolution that appears to every thinking man or woman is curtailed.

Science and scientific work is not promoted by demanding obedience to special truths and forbidding any work outside, but in reality it calls for the largest freedom and the broadest recognition of every new expression of progress, and with it, it demands independence of criticism and critical study.

Great medical societies should naturally have organs to represent them and publish their proceedings, and smaller societies should be encouraged to promote journalism that will represent them, and advance their interests; but to all this there is a limit, and it is a very grave question whether organized efforts of this kind can do the best work along the lines of progress and development.

Independent journalism should represent societies and organizations and work of every character from a higher point of view. Their standard is the great cosmic consciousness of medical growth and development, not the interests of societies, or the theories of schools, colleges or doctrinairs, but the thought of the

profession, and the spirit that is growing and actuates it. They may have commercial interests, but these are small compared with the reputation and growth which it builds up among the profession.

There are two prominent illustrations of this—*The London Lancet* and *The Britism Medical Journal*—both strong, powerful publications. The one represents the British Medical Association, the other is independent, and represents the entire profession. A very slight examination would show marked differences, which outline clearly journalism of the future and its trend.

There are illustrations in other fields. Take the numerous church journals, which represent certain creeds and doctrines, and take other journals, independent and non-sectarian, which discuss questions of a similar character, above theories and dogmas, and the same scientific trend and direction is observable here.

Through it all there are other illustrations. The partisan journals are growing less and less and more and more independent in their treatment of political theories. The independent journals are rising higher and higher, and we turn to them for the clearest summary of the real facts.

Through it all there is a spirit of freedom that calls for facts and truths, independent of special pleading. There are two other classes of journals that are doing great work. One is the personal journal, which appeals to subscribers and readers for all sorts of communications and letters, and presents a sort of a conversational clinic, on almost every phase of practice. These journals are post graduate colleges literally for large numbers of physicians, and while the editor has an enormous burden of censorship in his efforts to convey the best thoughts of the author, he is really doing most practical work in stimulating inquiry and rousing interest for a wider view in the men who could not otherwise be reached. These personal journals have a field, distinct and of intense interest which can not be ignored. The student of the future will find here the best history of the medical men of this century and the thoughts they are thinking and the work they are doing.

There is another class of journals that bring special studies along particular lines of research. They are the journals devoted to some particular branch of medicine. They address an audience already receptive and interested in the matter they present.

They give facts along special lines that are studied and welcomed, and furnish a distinct basis and point of departure for other and more exact work. These journals represent a very high grade of literature that is scientific, and with only one object, they present everything pertaining to it, and thus advance science in a most helpful way. Every physician who has a special devotion for some phase of medicine will turn to these journals for assistance and help, which no book can bring.

Medical journals, especially the weeklies, are conscious of changing opinions, and like the great secular dailies, strive to keep abreast with public sentiment and not be behind. Editors soon understand the value of clear-cut weekly histories of passing events, and while every now and then a heavy encyclopedic article creeps into its pages, it has an ornamental value, rather than otherwise.

Writers who aim to be exhaustive and who are unable to condense their facts, should shun the weeklies. Often the setting of the paper weakens its power. There are a large number of monthlies where these papers may be examined with great care, and will fit in with excellent adjustment.

The monthlies and the special journals sift out the facts, and give the proper summaries of progress and advance, and they are the journals that are invaluable. The weeklies are reports like those of the weather bureau, of the high and low barometers of the storm regions and the direction of the air currents and temperatures of medicine. We often smile at the forecasts of some assumptuous reporter, who tells us what the weather will be and fails. When journals fall into a judicial mood and write with a positiveness of the courts of last resort, and then have to recant and change, it is equally humorous.

When journals assume personally a broad, generous recognition of the facts of the present, and state them with candor and frankness, they are most commendable.

It is said with great truthfulness, that American medicine is most unique in the sense of breaking away from old theories and criterions and letting down the bars of theories and opening the range of thought in every direction. Books try to summarize and make clear this new trend of scientific work, and journals follow along with a sharper, clearer recognition of the facts and their application.

What we want and will welcome most heartily is exact statements and facts relating to medicine,, sociology, hygienic questions, schools and colleges, and all collateral subjects about which there may be differences of opinion. We want these presented above the plain of special pleading, bigotry and narrowness of theory, based on conceptions of yesterday.

We must recognize differences of opinion, different points of view and the fallability of theories and so-called facts. Thoughtful men, who study medicine from a higher point of view, assert that there is today about the same bigotry and scholastic conservatism which has greeted every advance of medicine in the past. Of course it is very much less than in the time of Jenner and his great discoveries, but there are physicians today who denounce and condemn facts which they do not understand with about the same spirit and vindictiveness that characterizes our forefathers.

Almost every great teacher and leader is plainly conscious of the stupid opposition which opposes every advance. He is also conscious of the credulty with which journals and books repeat theories that are unfounded and are flatly contradicted by every advance of exact work.

The teachings of the fathers of medicine were often very sound and suggestive, but it is folly to accept them without question. We have gone on, and any teachings of the past that will not bear the scrutiny of the present should have no power to influence our day and generation.

There are no infallible rules and system, nor can there be organized theories that are absolute and unchangeable. They are only good for today and may be put aside tomorrow.

Journals that do not recognize this revolution that consciously or unconsciously is coming into our lives, into our thoughts and studies and widening in many ways unknown before, make serious blunders. Journals are the training schools for the profession, not for all time, but for today, and the more independent and broader their studies, the greater will be their influence.

A significant fact was noted in the great medical library at Washington, where students of medical subjects called for medical journals more frequently than medical books. A reason given is, that the facts are of greater variety and more direct from journals than books.

One thing we should never forget, that the study of medicine, both scientific and practically, is hardly yet at the dawn, and resembles the first flashes of light seen in the East, showing that the sun is coming. Our boasted progress today is in that stage.

I close with a quotation from M. Laudero, a French physician, who wrote of books and journals in this country, in a recent number of the Parisian press.

"Medical journalism in America is virile, aggressive, sharp and often egotistical, and sometimes narrow, but there is usually a genuine spirit of growth and progress running through it all, and some day they will lead all the world in this field. Books written by Americans are always interesting, and stirring; and while often vague and obscure, they are seldom valuable, but have a sort of spirit of growth and progress that promises the highest possible attainments in the future."

Selected Articles

EMETINE AND ITS THERAPEUTICAL APPLICATIONS.

Emetine is an alkaloid extracted from ipecacuanha of which it is the most active ingredient, as stated in Wurtz's dictionary from which we derive the following information. Emetine is a white, slightly bitter powder, faintly alkaline in reaction, readily soluble in alcohol, only slightly so in cold water, insoluble in ether and the oils. It is obtained by treating the powdered root with ether and then with boiling alcohol. The solution is filtered, a little water is added and the alcohol is distilled off. A small quantity of fatty matter is deposited and is removed by filtration, and the aqueous solution is boiled with magnesia. The magnesian deposit is collected, dried and treated with boiling alcohol which dissolves the emetine. The alkaloid thus obtained is colored, it is purified by dissolving it in water acidulated with tartaric acid and shaking it up with animal charcoal. The filtered solution is then treated with an alkali which precipitates the emetine.

This body was prepared for the first time by Pelletier and Magendie in 1817. It will be seen that the discovery dates a long way back. It took more than a hundred years for its highly interesting therapeutical properties to be discovered. These have recently been elucidated and show emetine to be the quasi-specific remedy for dysentery due to amœba and for hæmoptysis. For that matter it is not emetine that is employed but its salts, the hydrochloride and the hydrobromide, particularly the former. We may add to these general characters, taken from a volume already ancient, that we are still very imperfectly acquainted with the physiological properties of the alkaloid. As a matter of fact the hypotensor and emetic principle, says Flandin, is cephæline, discovered by Pasl and Cowley; 100 grammes of the root contain gm. 52; and psychotrine which is present in the proportion of

gm 04 per cent. As for emetine it exists in the proportion of 1 gm. 45 per cent. Only quite recently did Velder find out that emetine, even in very weak solutions, is fatal to cultures of dysenteric amœbæ and inhibits the multiplication of the bacillus of dysentery. Having acquainted himself with the outcome of these researches he repeated them and obtained absolutely conclusive results which led him to make use of the salt of emetine in the treatment of this formidable enteritis of hot climates.

Rogers, like all who have practiced in countries where dysentery is common, was already aware that ipecacuanha itself might be looked upon as the best remedy. Like most of his fellow practitioners he employed it by the method known as the "Brazilian," which consists in fractional doses of a maceration of the plant. This mode of administration, however, is attended by various drawbacks, due to intolerance, which greatly impair its activity. It was in presence of these data, having taken cognizance of the results of Velder's researches, that it occurred to Rogers to make clinical application of his laboratory results by employing emetine in the treatment of amœbic dysentery.

He began by giving the patient 2 centigrammes of the drug which is, roughly speaking, equivalent to a dose of two grammes of the root. Then he fixed the dose at 3 or 4 centigrammes dissolved in a sterilized isotonic solution. The dose indeed has not varied very much in the hands of different observers, and the mode of administration has also remained approximately the same. Roger's trial with the drug administered by the mouth, need not be taken into account. Subcutaneous injections, which are always well borne and never give rise to either local or constitutional reaction, constitute the most practical method for the exhibition of the drug and is the one in general use. There is a total absence of nausea, indeed even when given by the mouth this was rarely complained of.

If we are to judge by the following communication it will be seen that Chauffar who, with his pupils has constituted himself the advocates of Roger's method in France, also prescribes 4 centigrammes of emetine a day and this dose may be doubled in

urgent cases. It is of no consequence where the injection is made though the usual spot seems to be under the skin of the thigh.

The very earliest results obtained were exactly like those noted by subsequent observers and already in Roger's work he gives expression to the same scientific enthusiasm as did, later on, his successors. In his monograph, the action of emetine is declared to be specific and Roger's does not hesitate to assert that when it fails the case is not one of amœbic dysentery. When this happens the case may be one of bacillary dysentery or some other affection of the intestine, especially of the rectum, whereas, if the amœba be present a favorable result unfailingly follows. Roger's statistics indeed, as well as the effects produced by the drug, fully justify this sweeping conclusion. Of the first 25 cases treated at Calcutta 21 recovered and the four others are open to questions since two of them were *in articulo mortis* when emetine was injected and the remaining two succumbed, one to dropsy and the other to sunstroke. Comparison with the statistics of cases treated with crude ipecacuanha is instructive and confirms the very marked superiority of emetine. Similarly, statistics which comprise the duration of the stay in hospital show that this is markedly curtailed with the new treatment. As a general rule, says Roger's, it has required 12 centigrammes of emetine to bring about recovery, but in a couple of days the stools will have resumed their normal appearance, and only now and then did it take three or four days to accomplish this.

We have pointed out that it is for dysentery that this treatment was introduced. But it was soon remarked that improvement of the stools was not the only favorable effect to be recorded. Acute hepatitis for instance is promptly relieved and is soon recovered from. When it is still in the pre-suppurative stage it almost always happens that no suppuration takes place. Should, however, this have occurred Rogers advises aspirating the pus by means of a simple puncture, then injecting six centigrammes of emetine *via* the orifice of puncture completing the course of treatment by giving emetine injections just as in dysentery. Chauffard, who was the first in France to institute the treatment described by Rogers, owed his initial success to an abscess of the liver the highly in-

structive notes of which he read before the Paris Academy of Medicine. The patient was a man who had previously suffered from amœbic hepatitis which had left a hepato-bronchial fistula of five months' standing. This gave issue daily to some 250 cc. of reddish pus. He presented dysenteric ulceration in the rectum in addition to a temperature oscillating between 99° and 100° F. The state of his general health was unsatisfactory and examination with X rays showed an opacity at the base of the right lung not to be differentiated from the liver dullness. This patient, whose state as will be seen was of the gravest, was given by Chauffard six injections in five days of 4 centigrammes of emetine each. After the first day the quantity of pus expectorated fell to 150 cc. On the third day there was inly 50 cc., on the fourth 45 cc. and since that date there has been no expectoration at all. All the symptoms mentioned above, as well in respect of the temperature as of the constitutional and radiographic indications, followed the same descending grade. Within a few days the patient might be looked upon as cured and, what is more, the cure was maintained.

The genuinely curative action of the drug, vastly superior to that of surgical intervention, was proved not long after by a case brought forward by B. Flandin and Ribadeau-Dumas. The patient in this instance was a woman, also suffering from suppurative hepatitis that had opened into the bronchus. At first surgical intervention, followed by a second, had cured the patient one after the other but after the operation on each occasion there was recurrence of the hepatic infection and pus continued to be expectorated.

After the second failure recourse was had to the emetine treatment which was then something quite new. No sooner had four injections of the drug been given than things began to progress as favorably as possible, the suppuration ceased for good and the general health returned to normal. Similar remarkable results were obtained in the case of a patient under Rouget's treatment at the Val-de-Grace in which the hepatic suppuration had not as yet found its way outside, and also in a patient of d'Aspres' which is interesting by reason of the fact that he had never been outside

France, thus proving that amœbic infection is possible even in subjects who have never lived in hot climates, and the possibility of the disease culminating in abscess of the liver. Here again emetine hydrochloride displayed its sovereign efficacy. These results were further confirmed in the case of a patient treated by Dopter who, on his arrival at the Val-de-Grace, was in such a perilous state that immediate operation was judged to be indispensable.

While these striking results bearing on abscess of the liver, a grave and often fatal affection, were being published, physicians called upon to treat amœbic subjects placed on record the constant success that attended the use of emetine in the treatment of dysentery, the commonest form of amœbic infection. The same names recur, particularly those of Dopter, Chauffard and Rouget. Among the patients presented by the last named must be mentioned the case of the colonial army officer whose affection was of such old standing that for upwards of ten years he had never had a stool that was not diarrhœic. And it is always within a few days recovery is obtained, in spite of the more or less protracted duration or the gravity of the case.

This persistent success, however, left open certain questions possessed of considerable importance. To begin with, do injections of emetine administered for the original attack of dysentery protect the patient against the formation of abscess of the liver? Secondly, will subsequent injections suffice of themselves to effect permanent cure of such an abscess? Biologists set to work at the same time as physicians and a reply to these interesting questions was provided by Marchaux, of the Pasteur Institute, and by Dopter of the Val-de-Grace. Their researches show that employed in presence of an abscess of the liver unquestionably containing pus emetine converts it in a "dead" abscess, resembling so to speak a cold abscess. That is the limit of its action. *Per se* it is incapable of bringing about absorption of the pus and the emetine treatment must necessarily be supplemented by surgical intervention if we are to get the better of the disease *in toto*. The intervention, for that matter, is limited to simple puncture for the purpose of evacuating the collection of pus and, once

evacuated, the pus is not reproduced. The cure of the dysentery on the other hand does not necessarily eliminate the possibility of hepatic trouble. This seems to be due to the fact that the amœba has two distinct parasitic forms, one vegetative, the other encysted. When the former, the cause of the dysentery, has been disposed of there remains the other which is capable some day of causing the hepatic complications. The alkaloid of ipecacuanha is powerless to prevent it in respect of this form though it is fatal to the former. These conclusions are well borne out in a case from Tonkin, reported by Dr. Loray des Barbares (of Hanoi). The patient was a man age 35 who, in May 1913, had a rather unusual intestinal attack in that it was not accompanied by fever or diarrhœa although microscopical examination showed quite clearly that it was of amœbic origin. It was evidently a case of incipient dysentery and he was put on the emetine treatment which at once disposed of the pathological symptoms. It was naturally supposed that the attack having been treated from the onset, the patient would be safe against other manifestations. Yet in the course of a few days an abscess of the liver formed, running a rapid course necessitating an incision. The patient recovered in a month. M. Borestin, who reported this case to the Surgical Society, very aptly called attention to the fact that in all probability the liver was already involved by the amœbasis at the time the intestinal symptoms supervened. This observer, too, calls our attention to the fact that emetine markedly influenced the hepatic symptoms in that, instead of containing thick, reddish pus as in most cases of liver abscess, this one merely showed a turbid, barely tinged fluid with some false membranes. We may add to these cases four others brought before the Society of Exotic Pathology by Gaide and Mouzels according to whom all these patients, though greatly improved, still presented amœbæ in their stools even after apparent recovery. This fully confirms the conclusions drawn by Marchoux and Dopter concerning the action of emetine namely, that it acts on one form only of the parasitic amœbæ and not on the other.

Must we draw the conclusion, as some observers do, that emetine is not possessed of the specific action with which it has been

credited by those who have derived so much benefit therefrom! This would hardly seem to be justified, for where emetine should and ought to act it does so perfectly, so much so that no other substance or treatment can be compared with it. But there are circumstances, nowadays well defined, in which the patient is exposed to subsequent risks, just as there are others, not less well known, in which the action of emetine must be supplemented and completed by the scalpel. It is only necessary to bear this in mind in order to proceed with confidence.

In the course of our remarks it has been pointed out that the only practical way to give emetine is by the hypodermic method. It is not that other methods have not been tried but that they have not yielded as encouraging results. Chauffard tried to complete a treatment commenced with hypodermic injections by administering emetine in enemata, but the patient who, for several days previously, had only had one or two daily motions, after the very first enema had fifteen obviously dysenteric stools. Marchaix, on the other hand, holds that the enema mode of administration is a very good one and Bizard obtained excellent results in children by administering it in enemata. It is plain that there is still much to be worked out. Nevertheless the enema, it would seem, may be employed when for any reason the drug can not be given hypodermically, with the exception of cases in which subcutaneous injections have been given previously.

Emetine, however, has been employed with success in conditions other than dysentery, and amœbic hepatitis, more particularly in respect of an accident, grave enough and common enough for it to be claimed that this therapeutical application surpasses in importance even the one just dealt with, remarkable though it be. This is its action in the treatment of *hemoptysis*. This innovation is the outcome of work by Flandin and Joltrain and we can not do better, in this second chapter, than to synoptise what the former of these two observers has written on the subject.

Flandin states, first of all, that in spite of the difference that strikes one at first sight between amœbic dysentery and tuberculosis hæmoptysis, it was the success that attended the action of

the drug in the former that suggested to him the idea of applying it in the latter. He was struck indeed by the disappearance of the blood in the stools under the influence of emetine. On the other hand he recalled the old treatment of hæmoptysis, still in favour, with ipecacuanha. Consequently, having one day to undertake the treatment of a young man suffering from incipient phthisis who had been vomiting blood for four days in spite of all that could be done, he tried to arrest the bleeding by means of emetine. He only had to give him a single injection of 4 centigrammes of emetine hydrochloride for the hæmoptysis to stop and this without any recurrence.

This result was really too striking for it not to be repeated. At the Medical Society of the Paris Hospitals, Flandin soon after read notes of seven fresh cases in which success was rapid and practically complete. In only one instance did the hæmoptysis recur and on each occasion the bleeding was arrested forthwith in the same way. Flandin naturally had many imitators who all reported similar favorable results, that is to say, in the great majority of instances immediate and final arrest of the accident. In very grave cases of tuberculosis subjects with cavities, when recurrence of the hemorrhage took place it was always cut short promptly by this treatment. Among those who brought forward instances of this were: Renon, Lesne, Josue and Belloir, Leon Bernard and Paraf. With regard to the statistics of these last mentioned physicians it should be mentioned that in one case, and one only, did the treatment fail. This was a case of overwhelming hæmoptysis. They endeavored to increase the efficacy of the alkaloid by administering it by the intravenous method but it was of no avail and the patient succumbed. At the present time cases of the kind are legion. Flandin published his communication in September 1913 and at that date only five months after the first application of the remedy, nineteen successes had already been recorded.

Flandin admits that he has no idea how emetine acts in this connection, but neither was any explanation forthcoming of the way in which ipecacuanha acted in similar conditions. The theory according to which the effect was due to lowering of the blood

pressure has been shown to be devoid of foundation and in any case this explanation could not well be invoked here, as is clearly shown by Flandin's observations.

The pharmacodynamic action of ipecacuanha and its alkaloids, still imperfectly investigated, does not provide any plausible explanation of the clinical data. We are driven to suppose that in ipecacuanha emetine is not the sole active principle since injection of a solution of total ipecacuanha hypodermically enables us to obtain fully as rapid results in hæmoptysis as with emetine, nay more, under these conditions the dose of emetine required is much smaller than the therapeutical dose of this same substance given alone. It seems plain therefore, that the association of active principles in the plant possesses a much more pronounced action than that of anyone of the active principles employed by itself. Moreover the specific effect of emetine on dysenteric amœbæ is also increased if total ipecacuanha is employed hypodermically. The results obtained by Boye, of Hanoi, seems to be conclusive on this point, confirming as they do the superiority of the medicinal action of the entire plant over the crystallized alkaloid.

The mode of administration is the same in hæmoptysis as in amœbic troubles, that is to say, we must inject 4 centigrammes of emetine under the skin. This is usually prescribed in such wise that the 4 centigramme dose is dissolved in one gramme of vehicle, the normal capacity of bulbs for hypodermic injection. The result of the injection, says Flandin, is most remarkable. Although the patient be in the middle of an attack of hæmoptysis, bringing up quantities of red blood, the bleeding forthwith ceases. He adds that no disagreeable sensation follows arrest of the hemorrhage, that there is no discomfort, no palpitation or vertigo and the patient, whatever position he may have thought fit to take, lies back in bed quite quietly as soon as the action of the drug comes into play. According to this observer it is well to keep the patient under the influence of the drug even after the desired effect has been obtained, and with this object in view to give him a fresh injection of emetine twelve hours after the attack of hæmoptysis which called for the intervention and a third and a fourth

should it appear desirable, and even a fifth, at intervals of 24 hours. The treatment is quite innocuous from every point of view.

Before concluding our remarks on the subject it may be well to devote a few words to another use for emetine which, on the other hand, does not appear to have much chance of being generally adopted *viz* its employment in certain forms of syphilis. The amœbicidal action of the product might lead one to infer that it would also exert a spirillicidal action. Triboudeaux and Roux found indeed that this spirillicidal action existed and they consider that it may prolong life in certain cases of spirilliform and amœbo-spirillary dysentery. In the only case of incipient syphilis in which it was tried, however, it failed. On the other hand Milian read notes of a case before the Medical Society of the Paris Hospitals in which a much more encouraging result was obtained. The patient in this case was a colonial suffering both from dysentery and syphilis. Arsenobenzol readily overcame the syphilis and he had also been cured of the concomitant dysentery. In view of the fact that the same remedy had cured both affections Milian decided to change the bearings and apply emetine in syphilis in its quality of a specific for amœbiasis. He obtained very satisfactory results in two subjects who had proved refractory to mercury and to 606. In non-treated syphilitics, however, he had less reason to be satisfied with his innovation.

We will therefore place on one side this still obscure application of emetine. We will simply point out how extremely valuable is this substance since it places a trustworthy arm in our hands against two very formidable affections. Amœbic dysentery with its associated hepatitis is indeed a formidable disease the statistics of which are surcharged with a very striking percentage of deaths. We possessed few effectual means of combatting it, whereas, now, we may fairly claim to be in possession of a specific remedy therefor which works wonders. On the other hand, to arrest hæmoptysis in tuberculosis subjects, to stop it immediately and permanently, is a task the difficulty of which does not

require to be insisted upon. Here again it places in our hands a weapon which proves uniformly successful. In how many pharmaceutical products would it be possible to assert as much?*Le Monde Medical.*

PILES—WITH ESPECIAL REFERENCE TO THE METHOD OF INTESTINAL INVASION AS APPLIED TO THE INTERNAL VARIETY.

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The term "pile," from the Latin word "Pila," meaning a ball or swelling, is, to my mind, a more adequate term than hemorrhoid from the two Greek words "blood" and "flow"—a flow of blood. True, the term "piles," is very loosely applied by the laity, nevertheless, from the standpoint of medical terminology, the word "pile" has an equal standing with hemorrhoid, when used by the medical profession. It is because of this element of catholicity in the term that its selection as a title of this paper was made. Both, unfortunately, are poorly descriptive and unscientific terms; anal and rectal variosities would seem to be not only more scientific and exact, but better adapted from a regional and pathological point of view.

Varicosities of the rectum and anus are as old as history itself, all races, all ages, and both sexes suffering from this condition in various proportions, according to the habits, customs and occupations of the individuals.

It is not within the scope of this short paper to go into the minute etiology and pathology or enumerate the various classifications of hemorrhoids. This may be had by reference to the standard text-books on the subject. During the present discussion a clear line of demarcation will be drawn for classification which will enable us to deal with the subject in a practical manner.

All anal or rectal varicose conditions covered with mucous membrane will be designated as internal piles or hemorrhoids,

while those covered with skin will be classified as external piles or hemorrhoids. The thrombotic pile and the hypertrophied anal fold of skin comprise a subdivision of the external variety. The so-called mixed pile or hemorrhoid is covered with mucous membrane at its upper portion, while the lower part is covered with skin. These mixed piles occur usually at the anal verge.

Internal piles originate above the external sphincter muscle, but may be found external to that muscle, according to the stage of their development and conditions of the muscle. Conversely, external piles may be found above the external sphincter muscle when associated with internal hemorrhoids of large size and a general laxity of the anal tissues, the internal hemorrhoids being held above both sphincters, thereby drawing up external hemorrhoidal tissue within the anal canal. Hence location is not always a safe guide in making a diagnosis or applying treatment, while the nature of the covering of the tumor gives its true identity and previous history.

The great variety of operations and methods of treatment advanced for the relief and cure of piles would appear to indicate here, as in several other departments of medicine, a lack of universality of application of any particular method; or, on the other hand, dissatisfaction with the ultimate result.

It seems to be the correct thing for each operator doing this line of work to originate his own special or ideal method of treatment. As a matter of fact, no one procedure is applicable to all cases of piles. However, in a large percentage of cases of the internal variety the method of interstitial invasion, in my hands, has proved of great value and satisfaction. The submucous diffusion of mildly irritating fluids, producing a plastic exudate which, becoming organized, applies the surgical principle of pressure to the weak and dilated venous structures, is not to be confounded with the injection method as usually understood. The injection of coagulating media into vascular hemorrhoidal structures is a hazardous procedure. The injection should never be made into the vein, but should always be extra-venous.

As a preliminary to successful treatment a thorough stretching of the sphincter is desirable. For this purpose the anesthetic of

excellence is nitrous oxide gas with ethyl chloride a good second. These anesthetics should always be administered by an expert. Digital manipulation is carried on, as an instrument like a speculum having no intelligence, is unsafe. Complete paralysis of the muscle is unnecessary and dangerous. The stretching should not be carried beyond the point when one feels the muscle is about to give away. Great care should be exercised so that the stretching process is not overdone, as a laceration of the muscle is more likely to produce incontinence, in my opinion, than the proper severance of the muscle by operative means. Gentleness and conservatism are the guiding thoughts of this process. The benefit obtained is more likely due to nerve stretching than muscular. The usefulness of the muscle is not impaired in the slightest, but the irritability and spasm are removed and the normal circulation of the ano-rectal region restored.

A few days after this dilation the method of intestinal invasion is applicable. Before beginning the treatment a thorough examination of the rectum and adjacent organs should be made to determine the presence or absence of demonstrable preëxisting causative factors or modifying circumstances, otherwise the subsequent treatment or advice would be founded on an irrational basis and failure would frequently be the ultimate result. Various fluids have been used and advocated. Acetic acid and phenic acid, diluted in water in various percentages, ergot, hamamelis, haziline, etc., have all been used by various men. Personally, I prefer solutions of phenol, 10 per cent to 40 per cent, according to the stage of development of the hemorrhoidal condition and the tolerance of the individual.

One large or two small hemorrhoids may be treated at one time. Treatments may be given at three- to five-day intervals. The injections are made *in site, using a speculum.* Three to seven minims of the fluid are injected, according to the size and location of the pile. The pile should be thoroughly swabbed with antiseptic solution before injecting. The solution for injection should be freshly prepared and filtered and the syringe and needle sterilized. It is always necessary to exercise care in order that no air is injected. Only uncomplicated internal hemorrhoids, that

remain above the sphincter, are fitted and amenable to this treatment. The duration of treatment varies from three to eight weeks, depending on the chronicity of the case.

A careful analysis of the description of this method will show its many advantages and points of superiority. The application of the treatment properly applied is safe and painless. Sloughing, hemorrhage, abscess or embolism are no part of it. Patients are kept on their feet and there is no detention from vocation. No part of the circulation of the anus or rectum is destroyed, as is not the case in all other operations for piles. The only objection to this system of treatment is the degree of skill and dexterity necessary for the correct application of its principles.

The philosophy of the method is simple. The principle of pressure is utilized here as in the treatment of varicose conditions in other parts of the body. This has been the great stumbling block in the part. How can pressure be applied to a varicose vein in the rectum? The injection is made outside the vein; a simple interstitial or submucous diffusion, which sets up a mild inflammatory reaction, producing an exudation of lymph, which, becoming organized, acts as a splint or support to apply the much-needed pressure to the flabby varicosities. The circulation of the perianal and rectal regions restored to normal by dilatation and the varicose veins firmly supported in this way, a gradual restoration to their natural condition results, while preserving the complete physiological integrity of the parts. A patient cured after this manner has all of the circulatory apparatus of the rectal and anal regions intact, which means there will be less liability of a recurrence than with one who has had a part of the circulatory apparatus destroyed by anyone of the radical operations.

In the past the injection method has been criticized on the basis of recurrence. The treatment by submucous diffusion is not as liable to recurrence as the other accepted methods of eradication. There is a certain percentage of recurrences that follow the ligature, the clamp and cautery, the Whitehead and all other operative methods. Patients who have been treated by the method of interstitial invasion have occasionally, after an interval of several years presented themselves on the basis of recurrence, but careful

examination and comparison with case-histories and charts have substantiated the fact that the pile formation was absolutely new, and in a different location. The superiority of the method from the standpoint of the patient, is marked, as these new hemorrhoids can easily be disposed of by a few painless office treatments. As a rule, the treatment is permanent. Cases treated and cured by me eight years ago are well and comfortable today.

Conservation seems to be (with the exception of the European war) the keynote of modern thought in its application to natural resources, human life and health; therefore, the conservative treatment of the diseases of the rectum is in perfect harmony with the latest conception of method.

RECAPITULATION AND RECOMMENDATION.

1. The classification of piles or hemorrhoids by the nature of their coverings; i. e., skin or mucous membrane, rather than location.

2. The restoration of free hemorrhoidal circulation by sphincteric manipulation prior to the intertitial invasion.

3. The application of the treatment through a speculum with the pile at its site of origin.

CONCLUSION.

The supposedly impossible phrase "Piles cured without cutting," is a realization by this method.

In selected cases this application is not only ethical, but rational and scientific.

The absence of pain and recurrence; the avoidance of ether and a hospital operation; the absolute safety of the method, when properly applied, all go to make up a complex of desirability difficult to eclipse.—*The Virginia Medical Semi-Monthly.*

Extracts from Home and Foreign Journals.

SURGICAL

Treatment of Infected Wounds.

Burk reviews the general principles for treatment of infected wounds in the soft parts, emphasizing the necessity for raising the region and keeping it quiet, with the joints arranged in the most favorable position for functioning in the future. With suppuration in any cavity, especially in a tendon sheath, numerous small incisions on each side and at the lowest part permit effectual drainage. He places great faith in Peruvian balsam, but for an encapsulated pus collection he prefers to swab out the cavity with concentrated phenol, neutralizing it half a minute or a minute later with alcohol. Very extensive wounds can be given open treatment to prevent any tendency to stagnation of the secretions. As the inflammation subsides, kaolin or charcoal may be found useful to help dry up the secretions. Burk has had invariably favorable experience with obstructive hyperemia applied to staphylococcus processes, but with streptococci the condition was aggravated by it.—*The Journal of the Amer. Med. Asso.*

Acute Appendicitis and Acute Appendicular Obstruction.

Mr. D. P. D. Wilkie states that according to his observations we never meet with a primary acute inflammation of the appendix without a prompt rise of both pulse and temperature. It is the rule, however, in cases of acute appendicular obstruction to have at the outset no appreciable rise of pulse or temperature, and it is ignorance of these important negative signs which has so often led to fatal delay. We must recognize that if acute appendicitis is a serious condition, acute appendicular obstruction is usually more serious, and is the one in which the call for immediate op-

eration is more clamant. From his experiments on animals and clinical observations Wilkie concludes: 1. Two acute pathological processes are met with in the vermiform appendix—acute appendicitis and acute appendicular obstruction. 2. Clinically, acute appendicitis is distinguished by the signs of inflammation, there being from the onset a rise in pulse and temperature. Acute appendicular obstruction gives rise to vomiting, colicky pain, and abdominal tenderness, but at the outset to no appreciable rise in pulse or temperature. 3. The changes occurring in an appendix, the lumen of which is completely obstructed, depend on the presence or absence of fecal matter within its lumen. 4. In experimental obstruction in an artificial appendix the changes vary greatly according to the nature of the diet of the animal previous to the experiment, rich protein diet being associated with much more rapidly destructive changes than carbohydrate. 5. Undigested protein, putrefactive bacteria, and an alkaline reaction together produce rapid gangrene in the walls of the obstructed organ.—*International Journal of Surgery.*

Rupture of Heart in a Child.

J. Anderson reports a case of this condition in a girl aged five years, who had been apparently well previous to her sudden death. The lesion which had given rise to the rupture was of remarkable character; a hematoma, one-quarter inch in diameter, had formed in the wall of the left ventricle and septum. Its cavity was filled with blood clot and its walls were ragged and granular. At its lower aspect it had ruptured externally into the pericardium, and a large probe could easily be passed through the aperture, which was situated one-half inch from the base of the ventricle. The thinned inner wall communicated with the interior of the ventricle by a large and irregular aperture, which was continuous with an extensive rupture across the inner portion of the posterior wall of the chamber. The torn area almost encircled the ventricle, and reached as far as a point immediately beneath the position of the left auricular appendix. The laceration occupied a fair depth of the muscle, and the wall of the ventricle, when viewed by trans-

mitted light, was quite translucent. The right ventricular wall was intact. The valves were of normal size and their curtains were healthy. Examination of the coronary vessels showed a stenosis of the lumen of both arteries, and the descending branch of the left coronary artery was obliterated at the seat of the rupture and could not be traced beyond it. The interpretation which was placed on the case was that the child was the subject of an abnormal development of the coronary arteries. The vessels were unusually narrow, and further, the lumen was encroached upon in places by the areas of thickening in the inner coat due evidently to a syphilitic endarteritis. The hematoma in the septum was more than likely the result of the thrombosis in the descending branch of the left coronary artery, and represented really a dissecting aneurysm of the heart wall; and the case is comparable with that described by Lazarus-Barlow, which, however, occurred in a man of advanced life. Another important factor in the case was inherited syphilis.—*Medical Record.*

Boiling Water Injections Into the Thyroid Gland for Hyperthyroidism.

Porter has performed some interesting experiments in the thyroid field and his labors seem to be borne out by the results obtained by other men. (*Surg. Gyn. and Obst.,* January, 1915.) The injection of hot water into the substance of the thyroid gland always results in a diminution of the size of the gland and in certain classes of cases it causes an abatement of symptoms.

An all-glass syringe of 10 or 20 ccm. capacity is used. The needle should be long, flexible and rather fine. The syringe is boiled with the water over a gas or alcohol flame. After proper cleansing the areas to be injected are infiltrated with one per cent novocain. Five to twenty ccm. of boiling water are injected. By partially withdrawing the needle and reinserting it, contiguous areas may be injected through one puncture. It is preferable to have the patients remain quiet from a half to one hour after inection. Sloughing has never occured. The needle should penetrate the skin as nearly at right angles as possible. Most patients

complain of a fullness in the goitre and some pain in the side of the occiput, immediately after injection, but the discomfort is trifling. The injections are to be repeated until the desired effect is attained.

If the treatment is being used preparatory to thyroidectomy, then it is well to repeat the injections every two or three days, if more than one is necessary; but if one has decided to try to affect a cure by this means, it will be better to wait a week or ten days before repeating the injections. It is better, especially in the larger goitres, to inject two, three, or more areas at one seance than to make the injections at intervals.

Clinical and experimental facts seem to warrant the following conclusions: 1. Injections of boiling water into the gland should be substituted for the socalled medical treatment in patients with small thyroids and moderate symptoms of hyperthyroidism. 2. This method is also particularly well adapted to the treatment of patients with moderate or severe symptoms and relatively small glands and especially to cases where the hyperplasia is circumscribed. 3 Patients with large goitres and extreme symptoms of hyperthyroidism should be treated with injections until they become safe surgical risks and then the gland should be removed. 4. Boiling water injections are not recommended in non-toxic goitre. In such cases, as in patients with large goitres and toxic symptoms but who are good surgical risks, thyroidectomy should be the method of choice. 5. In substernal hyperactive goitres the removal of which would be hazardous, boiling water injections under guidance of the eye, should be tried.—*Medical Review of Reviews.*

Rupture of the Lung Without Fracture of Ribs.

The first case I have to report is that of a boy eleven years of age who was skating on Bedford Avenue when, unfortunately, a yellow taxicab ran over the boy. On entering the Swedish Hospital there were some contusions over the upper part of the right abdomen and left side of the chest. The boy was in a profound

state of shock, although he had a temperature of 101½; pulse, 120, and respirations, 40.

The interesting thing about this to me was the queerness of the physical signs in the case. The right side of his chest was hyper-resonant, but not markedly so. The respiratory sounds were increased in volume. The voice sounds were increased in volume. There was no dullness in the upper portion of the chest at all. On the left side (I would say also that the respiratory excursions on the right side were very markedly increased) the respiratory motion was entirely absent. There was hyper-resonance all over the chest, absence of voice, absence of breath sounds and there was no vocal fremitus present anywhere on the left side of the chest. The boy while in the hospital (in fact, while being examined) vomited some blood. It was quite evident from the condition of his abdomen that there was no rigidity whatsoever. As there was not much the matter with him it was thought best to leave the youngster alone. A diagnosis of rupture of the lung was made in this case. The heart was pushed completely over to the right of the sternum. The youngster lived only a few hours and an autopsy was made by Dr. Wuest, who said that from his findings it was the first case he had ever seen in his life where the lung had been ruptured without a fracture of the rib. No ribs were broken anywhere.—*Long Island Medical Journal.*

Iodized Carbon in the Treatment of Infected Wounds.

An apparently effective method of employing iodine as a surgical dressing has been devised by L. Lemaire (*Presse Medicale,* February 18, 1915). This method consists in the use of a true solid solution of iodine in animal charcoal. In 1857 Warington discovered that if animal charcoal is mixed with iodine, the latter enters into a peculiar physical combination with the former. The phenomenon is one of absorption, in which there is a condensation of the iodine on the surface of the carbon molecules with the result that both substances acquire new physical and chemical properties. Lemaire used an iodized carbon containing ten per cent by weight of iodine. This was dusted upon infected wounds

in the same manner as surgical powders are ordinarily used. The results are said to have been excellent. The antiseptic action of the iodine in its altered state was supplemented by the absorptive property of the carbon, a property that has long been recognized. One advantage over tincture of iodine is the fact that iodized carbon releases its iodine quite slowly and is therefore devoid of any caustic action.—*Medical Record.*

MEDICAL

Inflammation of the Parotid Glands in Typhoid Fever.

An interesting discussion on this subject was held by the Societe medicale des hospitaux de Paris. Dr. P. Emile Weil has observed nine cases of parotid inflammation during the stage of crisis in serious typhoid fever. Two of these inflammations were merely fluctuating, others suppurating. The first were cured in a week, being treated merely by hot, wet compresses covered with oiled silk or other covering, renewed three times in twenty-four hours. In the seven other cases there were five deaths. The two cases of suppurating parotiditis which ended in recovery were treated by expression of the gland and repeated application of hot, moist compresses. Dr. Siredey remarked that while parotiditis is not rare in typhoid fever, it is more frequent in appendicitis. It is a frequent complication in intestinal infections. Siredey treats cases of parotiditis systematically by anointing with a salve containing one-sixth collargol, followed by hot moist dressings. Dr. Albert Mathieu has obtained rapid cures by applying compresses wet in very hot water at the tumefied point threatening suppuration. These applications, lasting from ten to twelve minutes, are repeated four times a day. Dr. Gailliard considers massage of the gland dangerous. Dr. Josue, on the other hand, believes that expression of the gland, practiced from the outset, constitutes an excellent method of treatment permitting the avoidance of a voluminous abscess. Dr. Netter, agrege professor at the Faculte de

medicine de Paris, is also in favor of glandular expression.—*The Journal of the Am. Med. Asso.*

Treatment of Pyorrhea by Emetin Hydrochlorid.

In the February, 1915, issue of the Dental Cosmos, there was published a communication from W. R. Chaplin, D.D.S., of Savannah, Georgia, describing the prompt disappearance of a generalized psoriasis of long standing during the treatment of pyorrhea by emetin hydrochlorid. This article was brought to my attention by Dr. Jos. H. Nuxoll, of Cincinnati, who referred to me a case of generalized psoriasis vulgaris in a woman patient of his who had pyorrhea. This psoriasis had existed since early childhood and had never been influenced by any of the classical treatments.

Following the suggestion made in Dr. Chaplin's communication, this woman received eight hypodermic injections of emetin hydrochlorid, each injection consisting of 0.022 gm. of emetin in 1 c.c. of distilled water. These were given semi-weekly and produced no nausea. The influence of this treatment on the skin eruption was marked after the third injection, and the body is now entirely clear. I have a second case now under treatment, and improvement is already begun, following four injections of the same amount of emetin. Unfortunately, I am not able to present photographs of the case first treated by me. The patient rebelled strenuously at such a suggestion, but fortunately, she permitted me to show the progress of the treatment to several professional friends, who were as much surprised at the results as I was.

I have communicated the results of this method of treatment to several of my confreres, and they have promised to experiment with it. I hope that we can soon arrive at some definite conclusion as to its real value and why it exerts such marked influence on this special and troublesome form of skin disease.—C. T Pearce, M.D., in *The Lancet-Clinic.*

Treatment of Diabetes with Casein and Cream.

R. T. Williamson, in carrying out this treatment, gives casein and cream in small quantities every two hours. The patient is kept at rest in bed, or on the sofa, and every two hours, from 8 a. m. to 10 p. m., receives a glass of artificial milk prepared from casein, cream, and water. One tablespoonful of casein is well mixed in a tumbler with one tablespoonful of cream until a paste is formed; then hot water (or cold if preferred) is added gradually until the tumbler is full, the mixture being well stirred with a teaspoon whilst the water is being added. A white fluid is thus prepared which has the appearance of milk. It contains milk albumin and fat, but only a very small percentage of milk sugar derived from the cream. The fluid may be sweetened with saccharine if desired, or a pinch of salt may be added, or it may be flavored with nutmeg, according to the patient's taste. Most patients prefer the fluid warm. Usually the patient takes this artificial milk quite well, and likes the taste; some take it well, but do not find the taste quite satisfactory; but a few patients complain that it causes nausea, and in such cases it should be at once discontinued. The fluid may be taken well when it is hot, but may cause nausea when lukewarm or cold. When it produces nausea, or is distasteful even when the fluid is warm, another preparation of casein should be tried. 1. This method will often remove the sugar from the urine when the ordinary rigid diabetic diet has been unsuccessful, and this is its great value. 2. The results are often prompt, the urine being free from sugar after two or three days. 3. After a period of treatment with casein and cream the patient is often able to take ordinary diet, or even a less rigid diet, without the appearance of sugar in the urine, whilst previous to the casein treatment the most rigid diabetic diet did not remove the sugar from the urine. 4. Though the sugar will return in the urine in course of time in most cases after the patient's diet has been relaxed, the return is much less rapid than when the sugar has been removed from the urine by an ordinary rigid diabetic diet. 5. The casein method is not expensive and is easily carried out. 6. In most cases of the very severe forms of diabetes in

which the urine contains much diacetic acid the casin treatment is of little value, and sometimes may be very unsuitable; still in certain cases it is of much service, and may remove the diacetic acid and even the sugar from the urine for a short time, and on returning to a less rigid diet the sugar excretion may be very small for a long time and the diacetic acid may not return for a long period. Such cases form only a minority of the cases of this class.—*Medical Record.*

"Empyema."

The pneumococcus is found in most cases. Empyema usually follows pneumonia, broncho-pneumonia and infectious diseases, as scarlatina, pertussis, etc. The condition is found equally in boys and girls, and as often on the left as on the right. Mortality is 73 per cent of cases in first year; 58 per cent in second year, and 16 per cent in third year. Empyema occurs at pneumonia crisis. If prompt attention is given the fluid will be serous; later clear, due to walled pus pocket. The bedside picture is important; the patient looks sick. The temperature chart is characteristic. The percussion note is of boardy character. When the fluid is considerable the heart apex is displaced and the apex beat may be felt in the epigastric region.

The use of an aspirating needle may cause death, though the instrument may not be at fault. The method practiced by the author in twenty-three (23) cases, has reduced the convalescent period. This consists in dissecting one inch of rib, with local anesthesia (one-half of one per cent novocain solution). A suction apparatus, operated with small motor, has been helpful in cleansing the cavity; this avoids sudden gush of fluid. The thorough cleansing of the cavity does real good. The suction may help also to stimulate or to aid the lung function.

Drainage tubes are often left in too long and do harm by producing local irritation. In author's cases drainage tube was discontinued in twelve (12) days.—*New Orleans Medical and Surgical Journal.*

Pure Paraffin Oil in Treatment of Ulcers.

A. L. Benedict, in the *American Journal of Gastro-Enterology*, states that for several years he has been using pure paraffin oil, ordering the administration of one-half ounce three hours after meals and late in the evening. Bismuth in some form is generally emulsified with the oil, and camphor, phenyl salicylate, menthol, and other remedies may be mixed with or dissolved in this menstruum as indicated.

The mineral oil probably acts as a protective lubricant, and as a base for distributing the bismuth or other contained drug over the lesions. It also seems to be negatively antiseptic. This remedy has been used with good results, not only in the treatment of gastric and duodenal ulcer, but also for malignant ulcers of the intestine, in which conditions it seems to arrest the development of the disease sometimes for a very long period.—*The Medical Brief.*

Relationship of Veronal, Sulphonal and Trional.

In the series of articles on "Practical Pharmacology," it is stated that "veronal is closely related chemically and therapeutically to sulphonal and trional," and that "its actions do not differ essentially from those of sulphonal and trional qualitatively"

As these statements, which are so commonly made, seem to me to be demonstrably incorrect, I feel that they ought not to be allowed to pass unchallenged. Of course all of these drugs belong to the series of aliphatic compounds and are therefore in a sense chemically related, but the chemical relation between veronal and sulphonal does not seem any closer than that between veronal and chloral, for instance. The characteristic radical of sulphonal is the ethyl-sulphone group ($C_2H_5SO_2$) which is not found in veronal, while the caramid group in veronal is not found in sulphonal. Chemically veronal is more closely related to ethyl carbonate than it is to the sulphone somnifacients. The physiologic differences between veronal and sulphonal are equally wide. While in overdose veronal is an active poison and in several instances has caused death, fatal results from acute sulphonal poisoning are extremely

rare. Moreover, the symptomatology of the poisoning is quite different. In a large number of patients veronal, even in doses not grossly excessive, will produce dermatitis: I have not seen any report of skin lesions following the use of the sulphonal. The characteristic symptoms of chronic sulphonal poisoning is hematoporphyrinuria, which as far as I know has not been caused by veronal. Even in therapeutic doses veronal often exercises a diuretic effect, apparently from its caramid group; this effect does not seem to be caused by the sulphones. Other differences in their action might be pointed out, but I think these facts are sufficient to show that veronal is not closely related to sulphonal and trional either chemically or therapeutically.—*The Journal of the American Medical Association.*

OBSTETRICAL

Retention of Remnants of Placenta and Puerperal Fever.

Winter holds, in contrast to the usually accepted opinion, that puerperal fever is not caused by retention of remnants of placenta; it only happens that they coexist in many cases. He admits that auto-infection from bacteria in the vagina is both possible and frequent, but he is convinced that the bacteria in the uterus are derived from without, infecting the wall, and that this occurs whether or not there is retained placenta. In support of this idea he cites statistics from his own clinic: Among 149 cases of retention of placenta the puerperium was afebrile in 66, or 44 per cent; it was slightly febrile in 75, 50 per cent; and there were 8 severe cases of fever, with one death. But in four of these severe cases there had been an operation that might have been responsible for the infection.

In order to demonstrate from the necropsy findings that the infection was caused by the retained placenta, it would be necessary to show that the entire thickness of the placenta was infested with bacteria, down to the maternal vessels. In all the cases examined

by Winter he found bacteria only in the peripheral part of the placenta. The reason he thinks it so important to decide this question is that the old conception of it makes it imperative to empty the uterus of the retained remnants at once; in so doing an opportunity is created for further infection.—*The Journal of the American Medical Association.*

The Management of Hemorrhage Post Partum.

Zweifel describes a number of practical measures to arrest hemorrhage when the uterus walls are not elastic enough to contract. When the labor contractions are weak, the atony of the uterus walls, revealed by this, persists after delivery and the hemorrhage keeps up unchecked, but there is no hemorrhage so long as the child is still in the uterus and the placenta is still adherent. Hence the imperative rule to delay the expulsion of the child until the uterus walls can be toned up by mechanical, thermic, chemical or electric means. If hemorrhage keeps up unduly after delivery, it must be arrested as speedily as possible, and he has found bimanual extragenital massage of the uterus a useful method. The left hand, with nails cut short, is worked straight down between the symphysis and the uterus, pushing the cervix firmly back against the sacrum, while at the same time, with the back of the hand and fingers, the uterus is pushed upward against the right hand which grasps the body of the uterus above and rubs and presses it, thus effectually massaging the organ. This procedure is easily and rapidly done unless there is too much fat in the abdominal walls. Working the left hand down in this way between the symphysis and uterus serves a second purpose also, as it shows whether or not the after-birth is loose. If it has become detatched, the umbilical cord is generally pushed out of the vagina by this manipulation, while, if the placenta is still attached, the protuding cord is drawn again by it.

As the uterus is being thus massaged, hot water 49 C. (120 F.) should be prepared, containing two teaspoonfuls of salt to each liter. Water alone dissolves blood corpuscles and thus checks coagulation. Hemorrhage from atony of the uterus is generally

arrested in fifteen minutes by the massage, thermic and drug stimulation. If it keeps up, or recurs after this, there is probably some internal injury, and Zweifel advises constricting the waist according to the Momburg procedure. This leaves the physician's hands free for internal examination. If the uterus is contracting and still the bleeding continues, it must come from some artery and this must be sought and ligated or the opening drawn up with a thread. Zweifel declares that if the os is completely dilated at delivery there can be no laceration of the cervix. It is better, he adds to wait for complete dilatation, using inflatable bags or even cutting the cervix; this is better than letting it tear. If the finger feels a slit in the cervix, the edge each side is seized with forceps. This arrests the hemorrhage and permits the edges to be sutured together between the forceps, which are not removed until the catgut is ready to be tied. Three illustrations are given to show the exact technic of the measures advised. When the uterus has to be tamponed, he has found most useful a purified tincture of ferric chlorid, made by evaporating the official tincture and redissolving it in distilled water to its former volume. Gauze dipped in this arrested hemorrhage, even in merely a 5 per cent solution, better than anything else he ever tried, and it is not caustic. It can be made up fresh for each case, the dried residue keeping well. —*The Journal of the American Medical Association.*

Treatment of Placenta Praevia.

Before viability, both in home and hospital practice, Winn states the Braxton Hicks method of version is demanded. After viability, provided the child is in good condition, the intra--ovular use of the elastic rubber bag followed by internal podalic version offers the best for both the mother and child. In home practice, when the bag is not available, Braxton Hicks' version again should be the treatment. During labor, in complete or partial placenta prævia, with great loss of blood, the child either dead or possessing little chance of living, Braxton Hicks' version offers the best results for the mother.

Whenever Braxton Hicks' version is employed it should always be followed by slow extraction. All efforts at rapid delivery by dragging the child through an undilated cervix will be followed by most disastrous consequences to the mother. For the milder varieties of placenta prævia, the marginal and lateral, simply puncturing the membranes is generally the only thing necessary to control the hemorrhage. The cervical and vaginal tampon is a makeshift at best, and if used at all should be used under rigid aseptic conditions and other precautions well defined.

Cesarean section in Winn's opinion has a restricted place in placenta prævia. It should be chosen under the following conditions: with the approach of full term, the placenta covering a great part of the whole of the os; the hemorrhage profuse, but not enough to make the mother a bad surgical risk; the child probably weakened, yet offering reasonable prospects of being saved; the cervix in a condition suggestive of prolonged and difficult dilatation; a negative history of vaginal contamination; and, the assurance of hospital technic.—*The Jour. of the Am. Med. Asso.*

Congenital Cyanosis Without Auscultatory Signs.

M. Grandjean described a form of congenital cyanosis which shows at autopsy a uniform contraction of the pulmonary artery, and an equal thickness of the walls of the two ventricles. In these cases there are no auscultatory signs of the heart condition. This is one form of "blue baby." The heart appears larger and heavier than normal, and this hypertrophy is greater the longer life is prolonged. There is a loss of substance of the inter-ventricular wall. The entire pulmonary artery and its branches are diminished in caliber. In some cases there is an entire absence of the pulmonary artery, and complete transposition of the aorta and pulmonary artery. There is no murmur or thrill because there is no inequality of pressure between the right and left hearts. There is no inequality in the contraction of the pulmonary artery and hence no vibration of an obstructed blood current. In these cases the cyanosis is complete, involving all parts of the body and limbs, conjunctiva and ears. At the slightest cry or exertion it deepens.

The extremities are cold, crises of suffocation occur. Auscultation gives almost no signs except an enlargement of the cardiac area of dullness. The prognosis is always bad, though some children have lived to be as old as fifteen years. The child is in a state of least resistance and is subject to any infection that may approach him; the lung insufficiently supplied with blood renders him subject to tuberculosis and pneumonia. Even measles is sometimes fatal.—*Pediatrics.*

Editorial

PUBLISHER'S NOTICE—The Journal is published in monthly numbers of 48 pages at $1.00 a year, to be always paid in advance.

All bills for advertisements to be paid quarterly, after the first insertion of the quarter.

Business communications, remittances by mail, either by money order, draft, o registered letter, should be addressed to the Business manager, C. S. Briggs, M. D corner Summer and Union Streets, Nashville, Tenn.

All communications for the Journal, books for review, exchanges, etc., should be addressed to the Editor.

TENNESSEE STATE MEDICAL SOCIETY.

The eighty-second annual meeting of this society came to a successful close on April 15, 1915. Many of the sixty-two papers scheduled on the program could not be read on account of lack of time, but those that were read brought out many interesting points in the discussions. Dr. E. C. Rosenow's paper "On the Etiology and Experimental Production of Appendicitis, Ulcer of the Stomach, and Cholecystitis," was by far the most original and interesting paper of the meeting. Whether the ideas advanced in this paper will stand the test of time and be verified by other men interested in the same line of work, remains to be seen.

The banquet given at the Tulane Hotel on the evening of April 14 was largely attended and was rather unique because of the fact that there were no regular speakers. There were speeches, however, and they were good in spite of the fact that they were really impromptu. The following officers were elected:

President, Dr. Edward C. Ellett, Memphis; Vice Presidents, Drs. Julian G. Price, Dyersburg, for western Tennessee; R. E. Lee Smith, Doyle, for Middle Tennessee; and Joseph W. Johnson, Chattanooga, for eastern Tennessee; Secretary, Dr. Olin West, Nashville; Treasurer and Trustee of the Association Journal, Charles N. Cowden, Nashville, reëlected; delegate to the American Medical Association, Dr. Jere L. Crook, Jackson; alternate, Dr. J. McC. Hogshead, Chattanooga; and councilors Drs.

Samuel M. Miller, Knoxville; W. Scott Farmer, Cookeville; Joseph F. H. Gallagher, Nashville; Alexander B. Dancey, Jackson, and James L. Andrews, Memphis.

A new department of ophthalmology was created and Dr. Giles C. Savage, Nashville, was elected President; Dr. Newton C. Steele, Chattanooga, Vice President; Dr. Octavius Dulaney, Dyersburg, Secretary. Knoxville was selected as the next place of meeting.

Training Deaf Children.

Volta Bureau, Washington, D. C.

Deaf Children:

Anyone interested in a little deaf child can obtain free literature explaining methods of training deaf children from infancy to school age by writing to The Volta Bureau for the Increase and Diffusion of Knowledge Relating to the Deaf, 1601 Thirty-fifth Street, N. W., Washington, D. C. This literature relates only to the training of little deaf children; not to medical treatment nor to the deafness that comes in later life. Age of child and other details are welcomed.

National Effort to Improve Teaching on Consumption and to Help Family Doctors.

For the purpose of securing more coöperation from physicians and nurses in the anti-turberculosis campaign, The National Association for the Study and Prevention of Tuberculosis has inaugurated a movement to bring the importance of this subject to the attention of these two groups, according to an announcement made from headquarters today.

Among the first things which the Association is trying to do is to induce the medical colleges and schools of nursing to give more instruction, particularly of a clinical nature, on tuberculosis. An effort will be made also to reach the individual practitioners and nurses by special booklets prepared for this purpose. The clinical and other facilities of the various organizations affiliated with the

National Association will so far as possible be made available for the widest possible use in training doctors and nurses in tuberculosis work.

"The object of this campaign," says Dr. Charles J. Hatfield, Executive Secretary of the National Association, in making the announcement, "is primarily to secure more accurate and earlier diagnosis of tuberculosis on the part of physicians and to show nurses the great opportunities of service in the home care of consumptives. We shall also be able to put the average family physician in touch with the best methods of treating tuberculosis and with the most recent literature on that subject, thereby affording to the general public increased protection from this disease. Practically all of the medical colleges and schools of nursing of the country have expressed their approval of our plan and have offered to coöperate with us. While the medical profession generally has unselfishly assisted the nation-wide campaign against this disease, we feel because of its prevalence, tuberculosis should be given special attention by medical students and practicing physicians everywhere. No other single disease demands so much time and attention from the general practitioner in medicine. We shall try to make it easy for any doctor or nurse to acquire a specialized knowledge of tuberculosis."

The American Social Hygiene Association.

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has been offered a prize of $1,000 by The Metropolitan Life Insurance Company, to be awarded to the author of the best original pamphlet on social hygiene for adolescents between the ages of twelve and sixteen years, approved by a committee of judges to be selected by the Association.

Competition for this prize is open to all.

The Metropolitan Life Insurance Company desires to use the winning pamphlet among its industrial policy holders.

The Committee of Judges will conduct the competition in accordance with the following conditions:

Contest closes July 31, 1915, at midnight; any manuscript received later will not be considered.

Manuscript should not exceed 3,500 words, and must be in English, and must not have been previously published.

Manuscript must be typewritten on one side only of plain white paper 8 in. by 12½ in.

Manuscripts must be paragraphed and punctuated for submission as "copy" to printer.

Each manuscript must bear some identifying mark or pen-name, but not the name of the author.

The author's name and address, and the identifying mark or pen-name should be in a sealed envelope, accompanying the manuscript; the face of the envelope should bear the mark or pen-name only.

More than one manuscript may be submitted by the same author.

The winning manuscript, in consideration of the award of $1,000, becomes the property of the donor of the prize, all rights therein being surrendered by the author.

The right to purchase any manuscript submitted, at the rate of 5c a word, is reserved by the Metropolitan Life Insurance Company and by The American Social Hygiene Association.

Any manuscript not winning the prize or purchased will be returned to the author if return postage is provided.

Address manuscripts and requests for further information to

The American Social Hygiene Association,
105 West 40th Street, New York City.

Examination of Candidates for Assistant Surgeon.

Treasury Department.
United States Public Health Service.

Washington, April 24, 1915.

Boards of commissioned medical officers will be convened to meet at the Bureau of Public Health Service, 3 "B" Street, S. E., Washington, D. C., and at the Marine Hospitals of Boston, Mass., New York, N. Y., Chicago, Ill., St. Louis, Mo., Louisville, Ky., New Orleans, La., and San Francisco, Cal., on Monday, June 21,

1915, at 10 o'clock a. m., for the purpose of examining candidates for admission to the grade of assistant surgeon in the Public Health Service, when applications for examination at these stations are received in the Bureau.

Candidates must be between 23 and 32 years of age, graduates of a reputable medical college, and must furnish testimonials from two responsible persons as to their professional and moral character. Service in hospitals for the insane or experience in the detection of mental diseases will be considered and credit given in the examination. Candidates must have had one year's hospital experience or two years' professional work.

Candidates must not be less than 5 feet 4 inches, nor more than 6 feet 2 inches, in height, with relatively corresponding weights.

The following is the usual order of the examinations: 1, Physical; 2, Oral; 3, Written; 4, Clinical.

In addition to the physical examination, candidates are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate and that they will serve wherever assigned to duty.

The examinations are chiefly in writing, and begin with a short autobiography of the candidate. The remainder of the written exercise consists of examination in the various branches of medicine, surgery, and hygiene.

The oral examination includes subjects of preliminary education, history, literature, and natural sciences.

The clinical examination is conducted at a hospital.

The examination usually covers a period of about ten days.

Successful candidates will be numbered according to their attainments on examination and will be commissioned in the same order. They will receive early appointments.

After four years' service, assistant surgeons are entitled to examination for promotion to the grade of passed assistant surgeon.

Assistant surgeons receive $2,000, passed assistant $2,400, surgeons $3,000, senior surgeons $3,500, and assistant surgeon generals $4,000 a year. When quarters are not provided, commutation at the rate of $30, $40, and $50 a month, according to the grade, is allowed.

All grades receive longevity pay, 10 per cent in addition to the regular salary for every five years up to 40 per cent after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses.

For invitation to appear before the board of examiners, address "Surgeon-General, Public Health Service, Washington, D. C."

Dr. R. N. Fryer.

We regret very much the death of our respected and venerable friend, Dr. R. N. Fryer, of Newbern, Tenn., which occurred in that town some time in April. Dr. Fryer had reached the age of 84 years and during his long life had been actively engaged in the practice of his profession and was esteemed by all who knew him.

The Seventh Pan-American Congress.

Coincident with the meeting of the American Medical Association at San Francisco in June, there will also be held gatherings of various medical bodies. One of the most important for all of America is the Pan-American Congress, which meets June 17-21. It embraces delegates from all of the republics of Central and South America and, therefore, will have a widespread significance. The first Pan-American Congress was held in the United States in 1893, all the others having been held in the Latin-American countries. It is expected that will be the most successful of all. The congress meets in seven sections, covering all branches of medicine and surgery. All members of the organized medical profession are eligible to membership on the payment of a $5 fee, which entitles one to a set of the transactions. The Treasurer is Dr. Henry P. Newman, of San Diego, Cal., to whom application for membership should be sent.

Reviews and Book Notices

"Medical Ethnology"—By Charles E. Woodruff, A.M., M.D., author of "The Effects of Tropical Light on White Men," and "Expansion of Races." Associate Editor of "American Medicine;" Lieut. Colonel, U. S. Army, retired; Member of American Therapeutic Association; Fellow Medical Association of the Greater City of New York; Member American Association for the Advancement of Science. New York. Rebman Co., 141, 143 and 145 West 36th Street.

We are due thanks to the publishers for a copy of this exceedingly instructive and entertaining work. It is not, strictly speaking, a book exclusively for the medical reading public as its title indicates, treating as it does of ethnological knowledge in the most scientific way, it presents in the most attractive manner many facts of the greatest possible interest to physicians. It presents exhaustively the influences of environment upon migrants. The author treats of the following subjects in his very interesting book, subjects in which the physician necessarily must take interest, viz.: Pigmentation, Respiratory Characters, Ether Waves, Effects of Infra-Red, Effects of Light and Ultra-Violet Effects of X-Rays, Effects of Radium, Actino-Therapy, Eye Diseases due to Light. From these subjects selected from the table of contents our readers can get an idea of the character and scope of the work. We feel sure that the practitioner can obtain much of interest and valuable instruction from this work.

"Surgery of the Blood Vessels"—By J. Shelton Hooseley, M.D., C.S. Surgeon-in-Charge of St. Elizabeth's Hospital, Richmond, Va.; a Founder and Fellow of the American College of Surgeons; Ex-President of the Richmond Academy of Medicine and Surgery; Member of Southern Surgical and Gynecological Association, etc. Illustrated. St. Louis. C. V. Mosby Co., 1915.

We regard this volume as one of the most valuable recent contributions to surgical literature. As an exposition of blood vessel surgery as developed, especially in the United States in the past few years, it is most exhaustive and thorough. It shows what has been accomplished in this country in this advanced de-

partment of surgery. Endo-aneurysmorrhapy, as developed by Matas; the transfusion of blood, as improved by Crile; the work of Halsted in the gradual occlusion of an artery, and the epoch-making work of Carrel, have all been clearly and carefully shown. The author's treatment of hemorrhage and the transfusion of blood is valuable and instructive. Everything relating to blood vessel surgery has been treated of and should prove of the greatest interest to the surgeon and to the general practitioner. The work will take its place with other classical works upon progress in surgery and is a valuable acquisition to medical literature.

Publisher's Department

Our readers' attention is called to the advertisement of Sanmetto in this number and to the announcement it conveys that it contains no narcotic or cocain and may be prescribed and dispensed without the use of the Harrison Anti-narcotic Prescription blank. The remedy is well known and widely used by the profession.

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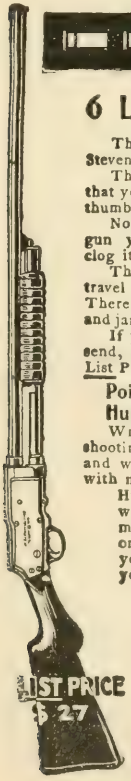

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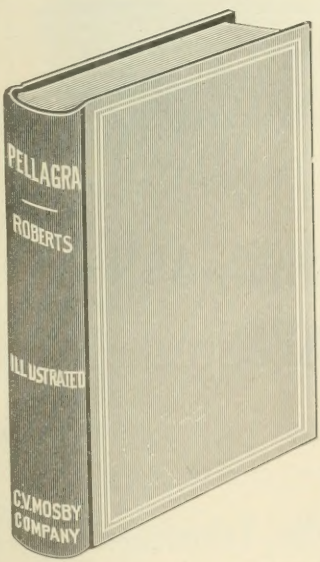

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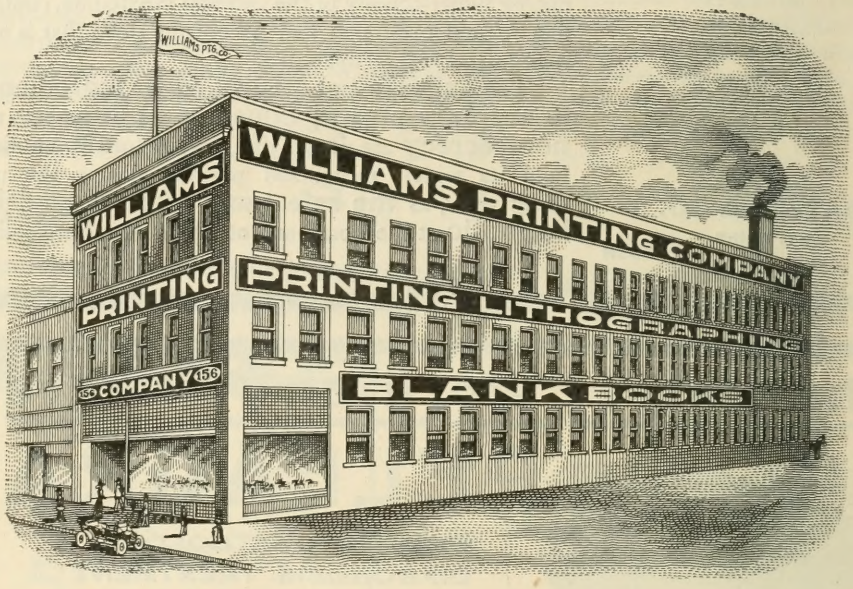

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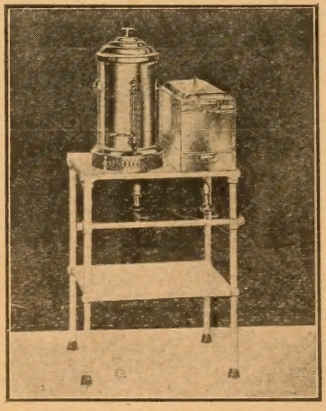

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